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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			KUNEMUND, ROBERT M	
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/713,013  
Filing Date: November 17, 2003  
Appellant(s): NUMATA ET AL.

**MAILED**  
**NOV 29 2007**  
**GROUP 1700**

\_\_\_\_\_  
Thomas Cunningham  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed August 6, 2007 appealing from the Office action mailed November 6, 2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

WO 00/71226	Beard et al	11-2000
6,307,099	Turner et al	10-2001

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 25, 26, and 31 to 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turner et al (6,307,099) in view of Beard et al (WO 00/71226).

The Turner et al reference teaches a method of making terephthalic acid, note entire reference. The reactants are fed into a reaction chamber. One reactant can be oxygen, note examples. The reactants are reacted at temperatures and pressures within the claimed ranges, above the boiling points, note examples. The resultant slurry is then recovered from the chamber. The slurry is then subjected to a separation step, where the pressures and temperatures are similar in nature to the reaction ones, note examples. The solids are thus separated to create a cake. The cake is then subjected to a drying step. The sole difference between the instant claims and the prior art is the specific drying step. However, the Beard et al reference teaches that the drying step is done with lower pressures than the separation steps, note page 4. It would have been obvious to one of ordinary skill in the art to modify the Turner et al reference by the teachings of the Beard et al reference to dry with lower pressure in order to vaporize the liquid and increase the speed of drying.

Claims 27 to 30 and 39 to 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turner et al (6,307,099) in view of Beard et al (WO 00/71226).

The Turner et al and Beard et al reference are relied on for the same reasons as stated, supra, and differ from the instant claims in the specific process parameters.

However, in the absence of unexpected results, it would have been obvious to one of

ordinary skill in the art to determine through routine experimentation the optimum, operable process parameters in the Turner et al reference in order to produce a purer product with increase speeds.

**(10) Response to Argument**

The combination of references, Turner et al and Beard et al, teaches the claimed invention. The combination of references teaches that reduction in pressure at one point will remove liquids from the cake, meeting the instant claims.

Appellants' argument concerning the Turner et al reference is noted. However, the examiner admits in the rejection that the Turner et al reference does not teach the use of a flash or lowering of pressure to dry using the heat of the material too. It is noted, however, that the instant claims do not exclude the use of dryers later in the processing. In fact, the instant specification teaches the use of dryers in the process.

Appellants' argument concerning the Beard et al reference has been considered and not deemed persuasive. The Beard et al reference does in fact teach a step where a cake is subjected to a depressurization step. This step causes liquids to be removed from the cake or solids. This is the same step as instantly claimed. The instant claims are not as limited in scope as argued by applicants. There is no limitation in the claim that the material after depressurization is not transported to a dryer. There is no limitation about the initial liquid content or the exact dryness after. The Beard et al reference does in fact teach that depressurization will effectively remove liquids from a solid cake. This in fact dries the cake. The reference clearly is not limited in scope to

having to send the material to a dryer. Also, applicants have not shown that there is a difference between the instant process of liquid removal and that of Beard et al.

Appellants' argument concerning the expectation of success is noted. However, the engineering fundamentals of having liquids remove due to depressurization are well known to one of ordinary skill in the art. There is no negative teaching in the Turner et al reference which would lead one of ordinary skill in the art away from this step. Also, appellants have offered no evidence as to why this would not work. Thus, one of ordinary skill would expect depressurization to work. Again, the claims do not recite highly dry product.

Appellant's argument concerning the savings and greater expected results has been considered and not deemed persuasive. The showings set forth in the specification have been considered. However, the showings are merely expected in view of the prior art. The art does teach liquid removal by flash or depressurization. The prior art does not teach adding energy when flashing. Thus, the savings of energy are expected and obvious to one of ordinary skill in the art. Appellants have not shown any increase dryness or savings in view of the Beard et al reference. Also, note the claims are broader in scope than the examples.

Appellants' argument concerning issue B has been considered and not deemed persuasive. The additional limitations set for in the claims are mere limitation that are within the skill of the art and obvious to optimize in order to increase yields and efficiency. Further, since the rejection of the independent claims is proper the rejection over these claims is proper for the same reasons.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

**(11) Related Proceeding(s) Appendix**

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

  
ROBERT KUNEMUND  
PRIMARY PATENT EXAMINER  
A.U. 1792

Conferees:

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Mr. Romulo Delmerido

